

Date: Sun, 21 Feb 93 12:33:01 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #240
To: Info-Hams

Info-Hams Digest Sun, 21 Feb 93 Volume 93 : Issue 240

Today's Topics:

 2510 mods.
 Amateurs on USENET List Jan 1993 Part 2 of 4
 ARRL BULLETIN 16 ARLB016
 Converter circuit ban is unenforcable
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 Keplerian Bulletin 8 ARLK008
 Macintosh software
 Need Advice on Microsat Rig.
 TS-520S
 Uniden HR2510 mods
 UPDATE: MOD for 800MHz RX on DJ-560!
 Yeasu FT-5100 qustions

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 21 Feb 1993 18:51:18 GMT
From: usc!rpi!cary114.its.rpi.edu!melllob@network.UCSD.EDU
Subject: 2510 mods.
To: info-hams@ucsd.edu

> flbbs!larry.mittman@ncoast.ORG (Larry Mittman) writes:
>
> I know all about the 11 and 12 meter mods, [for the Uniden 2510].

Well I didn't. Could somebody send me them please?
They are not at HAMSTER.business.uwo.ca.

thanks!

Brett Mellor
Rensselaer Polytechnic Institute
Troy, New York
mellob@rpi.edu

Date: Sunday, 21 Feb 1993 19:56:32 CET
From: usc!howland.reston.ans.net!newsserver.jvnc.net!gmd.de!dearn!esoc!
bttitmars@network.UCSD.EDU
Subject: Amateurs on USENET List Jan 1993 Part 2 of 4
To: info-hams@ucsd.edu

Just to confirm DC0HK is bttitmars@esoc.bitnet alias G8SAU my uk call..
Barry.. G8SAU/DC0HK 44.131.16.61 / 44.130.24.71 etc.
barry... enjoy all.

Date: Sun, 21 Feb 93 18:25:11 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!magnus.acs.ohio-state.edu!
cis.ohio-state.edu!mstar!n8emr!bulletin@network.UCSD.EDU
Subject: ARRL BULLETIN 16 ARLB016
To: info-hams@ucsd.edu

=====
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
=====

ZCZC AG57
QST DE W1AW
ARRL BULLETIN 16 ARLB016
FROM ARRL HEADQUARTERS
NEWINGTON CT FEBRUARY 12, 1993
TO ALL RADIO AMATEURS

SB QSTARL ARLB016
ARRLB016 HAM PLEADS GUILTY

JORGE MESTRE, NS3K, OF FAIRFAX VA, PLED GUILTY TODAY TO KNOWINGLY AND WILFULLY COVVUNICATING A FALSE DISTRESS SIGNAL, RESULTING IN THE U.S. COAST GUIRD LAUNCHING A MAJOR SEARCH AND RESCUE OPERATION ON AUGUST 7, 1992.

MESTRE WILL SURRENDER HIS FCC AMATEUR RADIO LICENSE, DISPOSE OF HIS AMATEUR RADIO EQUIPMENT WITHIN YP DAYS, AND MAKE IMMEDIATE RESTITUTION OF 50,=00 DOLLARS TO THE U.S. COAST GUARD. SENTENCING I SET FOR MAY 7. MESTRE COULD RECEIVE UP TO SIX YEARS IMPRISONMENT AND A FINE OF UP TO 250,000 DOLLARDQK

THE FCC USED DIRECTION FINDING DATA, DETAILED SIGNAL ANALYSIS OF THE TRANSMISSIONS, AND OTHER INFORMATION TO IDENTIFY MESTRE'S STATION AS THE SOURCE

ON THE DIL

DISTRESS MESSAGES{. MESTRE IS ALSO SUSPECTEBHOF HAVING BEEN INVOLVED IN AT LEAST THREE ADDITIONAL FALSE DISTRESS CASES IN TH

LAST FEW YEARS.

NNNN

Date: 19 FEB 93 10:21:15

From: pa.dec.com!engage.pko.dec.com!nntpd.lkg.dec.com!ryn.mro4.dec.com!
cimfie.enet.dec.com!taber@decwrl.dec.com

Subject: Converter circuit ban is unenforcable

To: info-hams@ucsd.edu

In article <9302190049.AA18341@netmail.microsoft.com>, a-kevinp@microsoft.COM (Kevin Purcell, Rho) writes...

>

>But also check out 97.135(a). You can't make more than one of these a
>year! In fact you can't make more than one linear that works below
>144Mhz in a year even if you don't sell it. A curious rule!

>

I think you have a typo there....97.315, right?

>

>Does anyone know what 2.815 says about PA kits?

>

The text of 2.815 is in appendix 8 of the ARRL's "FCC Rule Book." I won't type in the whole text, but it is the section that deals with external power amps operating below 144MHz and especially between 24MHz and 35MHz with specific exemptions for the Amateur Radio Service.

>>>==>PStJTT

Date: 21 Feb 93 11:58:59 GMT
From: news-mail-gateway@ucsd.edu
Subject: Delivery Failure Report
To: info-hams@ucsd.edu

From: NAME: Mail Postmaster
FUNC:
TEL: <POSTMASTER AT NEWPRTA1 at DOHENY at
TUS>
To: "Info-Hams@UCSD.Edu"@DECWRL@MRGATE

ALL-IN-1 was unable to deliver your message dated to

"green.richard"

- no such ALL-IN-1 account;

on node NEWPRT

The subject of the message was :
Info-Hams Digest V93 #224

Date: 21 Feb 1993 01:35:48 -0600
From: usc!cs.utexas.edu!uwm.edu!psuvax1!news.ecn.bgu.edu!uxa.ecn.bgu.edu!not-for-mail@network.UCSD.EDU
Subject: DESPERATE...NEED TO KNOW FACTS CONCERNING LEGALITY
To: info-hams@ucsd.edu

I am desperate to find out if it is legal to own a ham radio that has been modified to TRANSMIT out of band.
ie. a Yaesu FT-23R that can be modified to transmit between 140-164 MHz...I think.

I am well aware that it is very illegal to ever transmit out of those frequencies I am licensed for, but the question is about the owning of such a radio.

The FCC in Washington doesn't have a clue...they say it is like trying to find a written law saying it is legal to drive 31 mph in a 40 mph zone. The person I talked to said he was sure it was legal to own such a radio, but there is no written law that he knew of that would indicate that.

Does anyone know of something like this that would hold up in a court of law.

Thanks

Dave Webb N9HUR
internet mudaw@uxa.ecn.bgu.edu

Date: Sun, 21 Feb 1993 19:15:30 GMT
From: usc!rpi!bray1a.its.rpi.edu!maessm@network.UCSD.EDU
Subject: DESPERATE...NEED TO KNOW FACTS CONCERNING LEGALITY
To: info-hams@ucsd.edu

In article <1m7bck\$fpn@uxa.ecn.bgu.edu>, mudaw@uxa.ecn.bgu.edu (David A. Webb) writes:

|> I am desperate to find out if it is legal to own a ham radio
|> that has been modified to TRANSMIT out of band.
|> ie. a Yaesu FT-23R that can be modified to transmit between
|> 140-164 MHz...I think.

It is not illegal to own a radio that is capable of transmitting out of band. However, actually using that radio to transmit out of band is illegal without a license for that band, and is also illegal if the radio has not been type-accepted for transmission in that particular band.

Example: my Yaesu FT-26 came from the factory with a transmit range of 140-150 Mhz. The transmit range can be expanded by an internal modification to 130-174 Mhz. My owning of this radio is not illegal. However, since I don't have a commercial license, and since the radio is not type-accepted for operation outside of the 2m ham band, using it to transmit out of band would be illegal.

--
Mat Maessen N2NJZ | maessm@rpi.edu

-----+-----
The opinions expressed in this message definitely do NOT reflect the views of RPI, Roland Schmitt, or BAPP

(c) 1993 Fake-sig Co., Inc.

Date: Sun, 21 Feb 1993 14:12:44 GMT
From: usc!wupost!emory!rsiatl!ke4zv!gary@network.UCSD.EDU
Subject: help aligning Drake ML-2
To: info-hams@ucsd.edu

In article <14570648@hpnmdla.sr.hp.com> alanb@hpnmdla.sr.hp.com (Alan Bloom) writes:

>In rec.radio.amateur.misc, jmccombi@testament.bbn.com (Jon McCombie) writes:
>
>...
>>I know how to adjust the xmit freq. (use a freq. counter); how do I
>>adjust the recv freq.? I connected a DVM as directed in the manual, then
>>xmited on that freq. with another radio while adjusting the trimmer.
>...
>
>I believe the discriminator output is supposed to go to zero when the
>receiver is on frequency. It could well be that the discriminator
>is mis-tuned (not adjusted to the center of the IF passband.)

FM detector "zero center" isn't always at zero volts. The GE MVP receivers require a reading of 2.5 volts when properly tuned. However, since Jon seems to have the manual, following the book procedure is recommended. I suspect the problem is with the DVM not loading the circuit as designed. Try it with a Simpson 260. That was the meter of choice when the Drake was current.

Gary

```
--
Gary Coffman KE4ZV          | You make it,      | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it.     | uunet!rsiatl!ke4zv!gary
534 Shannon Way           | Guaranteed!      | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244   |                   |
```

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-----
Date: 21 Feb 93 13:55:07 GMT
From: news-mail-gateway@ucsd.edu
Subject: How to login to nic.funet.fi ?
To: info-hams@ucsd.edu
```

I am experiencing a problem when I try to FTP to nic.funet.fi which is a FTP site which should have some HAM/SWL files. When it asks for my INTERNET address I give it my address as: IQC109 at URIACC.URI.EDU This is my correct address. The host refuses to accept this and insists that I have made anvalid logon. I have also tried IQC109@URIACC.URI.EDU. Of course it does not translate the @ and still does not work. When I do get into the system, the CD command does not allow me to change any directories (it insists that the directory/file names I copy from their screen do not exist. Any hints on what I am doing wrong? I am assuming the directory problems may stem from the improper logon. I have been able to successfully log on to other systems (JPL for example) and move around the directories and download binary files.
Thanks....Ken Carr

Date: Sun, 21 Feb 93 18:25:05 GMT
From: usc!cs.utexas.edu!swrinde!gatech!usenet.ins.cwru.edu!magnus.acs.ohio-
state.edu!cis.ohio-state.edu!mstar!n8emr!bulletin@network.UCSD.EDU
Subject: Keplerian Bulletin 8 ARLK008
To: info-hams@ucsd.edu

=====
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
=====

ZCZC SK20
QST de W1AW
Keplerian Bulletin 8 ARLK008
>From ARRL Headquarters
Newington, CT February 20, 1993
To all radio amateurs

SB KEP ARL ARLK008
ARLK008 Keplerian data

Thanks to NASA, AMSAT and N3FKV for the following Keplerian data.

Decode 2-line elsets with the following key:

1 AAAAAU 00 0 0 BBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10

1 14129U 83058 B 93049.63647051 0.00000000 99999-4 0 09693
2 14129 027.0170 039.3347 5996940 059.0327 346.4198 02.05878389044859
RS-10/11

1 18129U 87054 A 93048.72858228 0.00000097 99999-4 0 5564
2 18129 82.9281 326.9109 0010904 295.6648 64.3373 13.72308611283468
UO-11

1 14781U 84021 B 93046.09611398 0.00000549 10184-3 0 4006
2 14781 97.8238 77.8331 0012964 31.5913 328.6069 14.68858390478794
RS-12/13

1 21089U 91007 A 93043.01588136 0.00000085 83733-4 0 3936
2 21089 82.9213 14.9359 0030957 33.2578 327.0513 13.74014278101336
AO-13

1 19216U 88051 B 93045.46345107 -.00000062 99999-4 0 5636
2 19216 57.6475 332.9272 7262121 308.3679 6.4386 2.09722755 4280
UO-14

1 20437U 90005 B 93047.70497863 0.00000149 66053-4 0 7217

2 20437 98.6237 133.2942 0011109 175.2832 184.8457 14.29735882160213
 A0-16
 1 20439U 90005 D 93046.10058181 0.00000195 83708-4 0 5448
 2 20439 98.6313 132.4918 0011058 180.0793 180.0392 14.29795854159991
 D0-17
 1 20440U 90005 E 93043.72242124 0.00000192 82144-4 0 5469
 2 20440 98.6309 130.3095 0011191 188.0644 172.0363 14.29927437159669
 W0-18
 1 20441U 90005 F 93035.22338149 0.00000233 98128-4 0 5475
 2 20441 98.6311 121.9214 0011597 215.3259 144.7153 14.29908715158455
 L0-19
 1 20442U 90005 G 93046.07887758 0.00000203 86680-4 0 5451
 2 20442 98.6319 132.8348 0012282 180.8662 179.2508 14.30000338160017
 F0-20
 1 20480U 90013 C 93044.20455127 0.00000017 67260-4 0 4383
 2 20480 99.0594 283.7688 0540939 7.5528 353.3323 12.83217568141417
 A0-21
 1 21087U 91006 A 93048.73918589 0.00000101 99999-4 0 7019
 2 21087 82.9445 141.2286 0035815 356.7600 3.3311 13.74509449103039
 U0-22
 1 21575U 91050 B 93040.24894820 0.00000225 83183-4 0 2435
 2 21575 98.4864 118.3602 0007834 324.9777 35.0893 14.36774641 82295
 K0-23
 1 22077U 92052 B 93050.87052321 -.00000000 99999-4 0 913
 2 22077 66.0811 209.8356 0011044 214.3489 144.5801 12.86276954 24757
 Mir
 1 16609U 86017 A 93050.08727348 0.00020193 25438-3 0 08886
 2 16609 051.6227 092.5136 0002589 017.2740 342.8973 15.58954964400712

Keplerian bulletins are transmitted twice weekly from W1AW. The
 next scheduled transmission of these data will be Tuesday, February
 23, 1993, at 2330z on Baudot, AMTOR and ASCII.
 NNNN

 Date: 21 Feb 93 19:05:01 GMT
 From: usc!wupost!uwm.edu!cs.utexas.edu!qt.cs.utexas.edu!yale.edu!nigel.msen.com!
 hela.iti.org!cs.widener.edu!dsinc!ub!galileo.cc.rochester.edu!
 uhura.cc.rochester.edu!bstp_ltd@network.UCSD.
 Subject: Macintosh software
 To: info-hams@ucsd.edu

I would like to know if a program is available that gives you practice tests,
 but will also let you print out practice tests. I was also curious if there
 are good morse code programs that will make up practice QSO's as well as
 give practice words etc. Where are these programs available. Any info would
 be welcome.

SIO chips and modify the clock circuit to allow everything to run twice as fast, a trace cut and a jumper wire. Second, you want to dump the present opamp used for pseudo-RS232 and replace it with the pin compatible TL084. Now your TNC will be able to do 19.2 kb to the computer while doing 9600 to the modem. This will reduce the buffering load. Okay now second problem fix, dump the factory firmware ROM and replace it with one burned with the K3MC KISS only code, or the GRAPES KISS-fast code. This will prevent lockups and dropouts. Finally, and this is the real magic, install a TAPR digital state machine DCD detector circuit. This will eliminate the thousands of "garbage" packets you're receiving from your unsquelched FT736R. These noise packets are what's overflowing the buffer.

Now let's look at your RF problems. First of all, the Icom preamp wasn't your best choice. An ARR or SSB Electronics preamp would be better since you aren't supplying much signal to work with through the vertical. The vertical is also unlikely to have enough gain to allow you to uplink with the barefoot FT736R. You'll likely need a 100 watt amplifier to be heard throughout a pass. Note you can often hear these microsats with a HT and a rubber duck, but for good solid horizon to horizon copy you want something considerably better.

Now let's look at the antenna itself. You are correct in surmising that a high gain vertical would be undesirable. While tracking gain antennas are best, very good results can be had with a Lindenblad, or with crossed horizontal dipoles mounted above a ground screen, or even a J-pole optimized for a little up angle radiation. You want the vertical radiation profile of the antenna to resemble a flattened hemisphere. You need maximum gain toward the horizon, but you don't want a hole overhead. This will be a low gain setup, between 1 and 3 db over a simple quarterwave monopole.

Steerable yagi arrays are much the better choice since their gain reduces the uplink power requirement and the preamp sensitivity requirement. The antennas need not be high, I used a pair of yagis on top of a Radio Shack roof tripod sitting on the ground. That only puts the antennas about 6 feet off the ground. Remember you'll spend most of the pass looking up at some angle, so height isn't that important. Getting up above local obstacles *is* a help, however. My current setup sits on top of a 70 foot tower. But above about 20 degrees elevation you can't tell the difference.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Sun, 21 Feb 93 13:27:02 EST
From: anomaly.sbs.com!n1mpq!system@uunet.uu.net
Subject: TS-520S
To: info-hams@ucsd.edu

tatsuya@sofya.math.byu.edu writes:

> I have got a problem w/ TS-520S.
> Does anyone help me out??????? please.....
>
>
>
> thnx
> tatsuya

A good idea might be to state what the problem is.

Tony

-- Tony Pelliccio, N1MPQ/AA // Why do some hams run 20mW //
-- god @ garlic.sbs.com // into a stub-duddy in a car //
-----// and wonder why they can't //
-- And for those wondering: // hit a repeater? //
-- Yes I AM flame retardent! -----
-- #include ASBESTOS_UNDERWEAR ON -- Soon a 2x2 call --

Date: 20 Feb 93 15:22:00 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!ncoast!flbbs!
larry.mittman@network.UCSD.EDU
Subject: Uniden HR2510 mods
To: info-hams@ucsd.edu

Has anyone on the net any knowlege of whether the Uniden HR2510 ten meter rig can be modified to become a SIX meter rig? I know all about the 11 and 12 meter mods, but I would like a 6 meter mod. Now, I know that transverters can be attached to any 10 meter rig to give 6 meter output, but what I am looking for is an out-and-out conversion into a 6 meter rig. I also know that this probably will cut the output

power, but coupled with the power mod, it should be able to get some decent power.

I have looked at regular 6 meter rigs and they are VERY expensive.

This mod would give me a decently priced 6 meter all mode rig.

Any help out in Net land?

73 de N8MGU

... OFFLINE 1.50 "Recycle - for us and them!"

Date: Sat, 20 Feb 1993 17:40:02 EST

From: uunet.ca!xenitec!lemsys!clemon@uunet.uu.net

Subject: UPDATE: MOD for 800MHz RX on DJ-560!

To: info-hams@ucsd.edu

In article <Feb.16.15.01.03.1993.26776@clam.rutgers.edu>, robert Steuer writes:

> Here is the mod for the DJ-560. I haven't had my friend try it yet,
 ^^^^^^

> but thanks anyway to Kevin Jessup for supplying the information!!
>

> There is NO mod required to do crossband repeat. It is a standard
> feature. If crossband repeat operates on the 800 MHz band (after
> the modification), that is another matter!

>

> Performing the aircraft mod (as described in the back of the owners
> manual, also gets you 800 Mhz).

>

> BTW, cutting the RED jumper provides AIRCRAFT and 800 MHz.

> Cutting the BLUE wire provides out of band transmit (but NO

> guarantess that performance will be within amateur band specs).

>

> To enable 800 MHz, press the UHF key 3 times (to guarantee that your

> are in UHF VFO mode). Then press the function key (keep it held

> down) and then press UHF.

Look guys, this is REALLY, REALLY starting to bother me. Over the past 6 months, I have seen mod after wonderful mod supposedly for the DJ-560 for aircraft, crossband, you name it. Can't you people type? Or is it that you can't read. This mod is for the DJ-580, you know, the new radio that does all of this stuff. The DJ-560 has no aircraft receiver, it has NO crossband repeat in the back of the manual and it doesn't have a red AND a blue jumper inside! What is so confusing about 560 vs. 580? The only mods on the 560 that I know about (please add any real ones) are to

clip the wire inside. That's it. #212 in FL mode opens receive on a 560E and #508 (just like x-band on the 580) says "OPEN" but does nothing apparent. #212 also says OPEN on a 560T, but does nothing.

If anyone else has any more REAL mods for the 560, please step forward...

--

Craig Lemon VE3XCL (Advanced) - Kitchener, Ontario. +1 519 741 0297
clemon@lemsys.UUCP clemon@lemsys@xenitec.on.ca | 1B Electrical Engineering
TCP/IP: ve3xcl@ve3xcl.ampr.org [44.135.84.51] | University of Waterloo
AX.25 Packet: ve3xcl@ve3euk.#SWON.ON.CAN.NA | Waterloo, Ontario, CANADA

Date: Sun, 21 Feb 93 13:28:33 EST
From: anomaly.sbs.com!n1mpq!system@uunet.uu.net
Subject: Yeasu FT-5100 questions
To: info-hams@ucsd.edu

bwilkins@iat.holonet.net (Bob Wilkins n6fri) writes:

> :
> : Oh.. got my MW-1 wireless microphone for it today too. Can't use it in
> : the house because there's too much RF noise here but works great in the
> : car. And the MW-1 duplicates ALL front panel controls with the exception
> : of the power button. Pretty cool stuff. Now I don't have to reach down
> : and fiddle with the knobs....
> :
> : Tony Pelliccio
>
> Would you expand your comments a little...what do you mean too much rf noise?
>
> What is the cost? How does it interface with the radio? Thanks bob
> --
> Bob Wilkins n6fri voice 440.250+ 100pl san francisco bay area
> bwilkins@holonet.net packet n6fri @ w6pw.#nocal.ca.usa.na
>

Too much RF noise ie: a computer, cordless phone, baby monitor in the next apt, etc. The audio goes over 49.85MHz so you can see where that problem comes in. Cost of the unit is \$95.00 or so, depending on which outlet you buy it from.

Interfaces to the rig via a standard mic plug. The receiving unit is only about 1'h x 2w x 1/2d.

Tony

```
-----  
-- Tony Pelliccio, N1MPQ/AA          // Why do some hams run 20mW    //  
-- god @ garlic.sbs.com              // into a stub-ducky in a car    //  
-----// and wonder why they can't  //  
-- And for those wondering:          // hit a repeater?              //  
-- Yes I AM flame retardent!         -----  
-- #include ASBESTOS_UNDERWEAR ON -- Soon a 2x2 call                --  
-----
```

End of Info-Hams Digest V93 #240
